

Gowanus Canal

May 26, 2009



The Goal:

➤ CLEAN THE GOWANUS CANAL:

1. Clean the Water
2. Clean the Mud



1. CLEAN THE WATER

- NYC will –
 - Rehabilitate flushing tunnel to increase flow
 - Rehabilitate pump station
 - Divert about 1/3 of annual CSO volume away from Gowanus Canal
- Actions will improve dissolved oxygen and reduce pathogens & odors
- Actions required under Consent Order with NYSDEC
- Costs \$178 million; contract to be awarded by 6/30/09

1. CLEAN THE WATER

- NYC also plans to dredge decaying organic material from 750 linear feet at upper end of Canal
 - Material has accumulated over decades from CSO
 - Material causes odors at low tide
 - ~\$15 million; work planned to begin in 2014
- Superfund listing would not delay these actions

2. CLEAN THE MUD

- WHY?
- WHERE?
- HOW?
- HOW MUCH?
- WHO?
- WHEN?



Clean the Mud: WHY?


- 150+ years of industrial activity has left Canal mud heavily contaminated.
 - Very high concentration of PAHs -- contaminants associated with Manufactured Gas Plants (up to 4.5% by weight)
 - Other contaminants include PCBs, Lead, Cadmium, Arsenic, Zinc
- Potential risks from:
 - Direct human contact with sediments and surface water
 - Canoe & kayak paddlers
 - Flooding
 - Human consumption of fish, crabs
- Noxious odors
- Heavily contaminated sediments and upland sources continue to pollute the environment

Clean the Mud: WHERE?

- Cleanup should address full length of Gowanus Canal
- **Essential to evaluate and address nearby upland (onshore) facilities that may continue to leak hazardous contaminants into Canal.**
 - Failure to address upland facilities would result in recontamination of Canal sediments

Clean the Mud: HOW?

Three possible mechanisms have been identified:

- Superfund
 - “Superfund Alternative Approach”
 - Water Resources Development Act (“WRDA”)
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- The bottom right portion of the slide features a decorative graphic of several concentric, light blue circles, resembling ripples on water, set against the solid blue background.

Clean the Mud: How?

1. SUPERFUND

- Process managed by EPA
 - Consultation with other agencies & stakeholders
- Comprehensive approach – will address sediments in the Canal **and upland sources.**
- Funding from Potentially Responsible Parties (“PRPs”)
 - Law gives EPA extensive information-gathering and enforcement authorities. EPA can compel PRPs to carry out cleanup.
 - Cleanup comes first; litigation, if needed, comes later.
- Additional funding from Superfund available
 - Important for upland sources with no viable PRPs

Clean the Mud: How?

2. “SUPERFUND ALTERNATIVE APPROACH”

- Process managed by EPA, same as under Superfund.
- Purely voluntary – EPA cannot compel PRPs to take on the work
 - No offer has yet been made
 - Approach has rarely been used at multiple PRP sites
- Timing unknown -- depends on if and when offer is made
- Approach may not be comprehensive
 - Volunteers may not be willing or able to carry out upland work
- Potential delays if volunteers fail to carry out work as promised

Clean the Mud: How?

3. WRDA

- Process managed by U.S. Army Corps of Engineers (COE)
 - Requires approval of cleanup plans by EPA and NYSDEC
- Requires specific Congressional appropriation
 - Maximum federal contribution – 65%
 - Maximum \$50 million/year authorized under WRDA for environmental restoration
 - Requires local sponsor to guarantee non federal share
- May not be comprehensive
 - COE does not have authority to require upland facilities to be cleaned

Clean the Mud: HOW MUCH?

- EPA Preliminary Estimate = 330,000 cubic yards to be dredged
- Sediment removal and disposal likely to cost hundreds of millions of dollars
- Costs to address upland facilities cannot now be estimated, but could be significant

Clean the Mud: WHO?

1. Superfund

- EPA manages process
- EPA would carry out Remedial Investigation and Feasibility Study (RI/FS) for Canal sediments
- EPA, NYSDEC and/or PRPs would carry out RI/FS for upland sources
- EPA and NYSDEC make final cleanup decisions
- PRPs responsible for funding or performing cleanup
- Additional federal funding available if necessary

Clean the Mud: WHO?

2. “Superfund Alternative Approach”

- Requires that PRPs volunteer to pay for & carry out work
- EPA manages process, makes final cleanup decisions
- No additional federal remedial funding available

3. WRDA

- COE manages process, makes final cleanup decisions
- Up to 65% paid by US taxpayers
- Local sponsor (NYC) must guarantee remainder
 - Funding for local share could come from PRPs on voluntary basis

Clean the Mud: WHEN?

1. Superfund Estimated Timeline:

- **RI for Canal Sediments**
 - Extensive sampling already done by COE & National Grid
 - Limited additional sampling needed to fill data gaps
- **FS for Canal sediments completed in about 12 months after completion of RI**
- **Record of Decision for sediments within a year of completion of FS, followed by Remedial Design & Remedial Action for Canal sediments**
- **Study and cleanup of upland sources would be performed concurrent with Canal sediment studies and cleanup work**

Clean the Mud: WHEN?

2. “Superfund Alternative Approach”

- Start date unknown – depends on volunteers to make proposal
- Canal sediment work could proceed on same schedule as under Superfund if volunteers are willing
- Considerable uncertainty about upland sources
 - Volunteers unlikely to be willing and/or able to perform study and cleanup of all upland sources

Clean the Mud: WHEN?

3. WRDA

- ***Provided that sufficient funding is appropriated by Congress and guaranteed by local sponsor --***
 - Study and Design for Canal sediments could proceed on same schedule as under Superfund
 - Cleanup work likely to take longer than under Superfund because of annual authorization constraints
- **Considerable uncertainty about upland sources**
 - COE does not have authority to compel upland source cleanups

Stakeholder Involvement

- Superfund provides for extensive Stakeholder involvement
 - Local residents & commercial property owners
 - Community groups
 - State and local government
 - Commercial & industrial operators
 - Prospective developers
- Citizens Advisory Group likely to be formed
- Technical Assistance Grant available
- Resulting cleanup decisions have legal legitimacy
 - Enables timely implementation, even in absence of agreement among all parties